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ABSTRACT

The extent to which an individual's experience with and participation in athletic activities is constrained by gender connotation of the sport, sex of the individual, and the individual's classification on the Bem Sex Role Inventory (BSRI) was examined. A Sports Participation Questionnaire was completed by 80 university students selected on the basis of their BSRI scores to provide equal numbers of male and female sex-typed, cross sex-typed, androgynous, and undifferentiated subjects. Subjects' scores for overall experience were entered into a two (sex) by four (BSRI) by three (category appropriateness) analysis of variance with repeated measures on the last factor. No sex differences were found for overall sport experience or participation. Males and females both preferred neutral sports the most, followed by sex-appropriate and then by sex-inappropriate sports. Sex-typed males reported significantly less experience and participation with sex-inappropriate sports than did androgynous and undifferentiated males. Sex-typed females reported significantly less participation in sex-inappropriate sports than did androgynous and cross-sex-typed females. Sex-typed subjects paid more attention to gender when deciding to reject sex-inappropriate sports than did androgynous and undifferentiated subjects. (Author/NRB)

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The Effect of Sex Role Stereotyping on Sport Participation

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Abstract

This study examines the extent to which an individual's experience with and participation in athletic activities is constrained by the gender connotation of the sport, the sex of the individual, and the individual's classification as gender schematic on the Bem Sex Role Inventory. No sex differences were found for overall sport experience or participation. Males and females both preferred neutral sports the most, followed by sex-appropriate and then by sex-inappropriate sports. Sex-typed males reported significantly lesser experience and participation with sex-inappropriate sports than androgynous and undifferentiated males. Sex-typed females reported significantly lesser participation in sex-inappropriate sports than androgynous and cross-sex-typed females. Sex-typed subjects paid more attention to gender when deciding to reject sex-inappropriate sports than androgynous and undifferentiated subjects.

This research addresses the general question of how females and males decide which sports and activities they will participate in and what the basis is for those decisions. More specifically, it addresses the following issues: Why do so few women participate in stereotypically masculine activities such as karate, weight-lifting or wrestling? Why do so few men participate in stereotypically feminine activities such as figure-skating, field-hockey and ballet? The research reported here examines the extent to which an individual's choice of and behavior in athletic activities is constrained by the gender connotation of the sport, the sex of the individual, and the individual's classification as gender-schematic or gender-aschematic on the Bem Sex Role Inventory (BSRI). Further, it investigates individual differences in the use of gender and gender stereotypes in decisions involving sex-inappropriate sport participation and interest.

The sport domain was chosen for several reasons. First, participation in sports is an integral part of American life. Regardless of geographic location, socioeconomic status or age, individuals have a wide variety of sport activities available to them. From grammar school through college, children are expected to fulfill physical education requirements. Second, through participation in individual and/or team sports, the individual learns more

than the particular activity; s/he learns cooperativeness, competitiveness, discipline, persistence and fairplay among other traits. S/he learns how to cope with failure and how to build upon success. Finally, the individual learns the mental and physical abilities and limitations of his/her body through the development of perceptual and physical skills. These qualities are not specific to optimum sport performance; they are also useful and often advantageous in other areas be it academic, occupational or personal.

Most importantly, although sport activities are widely available and can contribute positively to the individual's overall mental and physical development, sports are differentially available to males and females. That sport is a masculine domain remains an unchallenged notion (Griffin-Shelley, 1983; Harris, 1975) and may underlie the well-documented differential treatment of men and women involved in sport (United States Commission on Civil Rights, 1980). Beliefs that athletic participation "masculinizes" women (Gerber, 1974; Harris, 1980) have adversely affected women's interest and participation in sport. The view of the female athlete as aesthetically displeasing coupled with the belief that women cannot withstand the rigors of competition has served to limit (and in some cases completely prevent) access to various sports (Dyer, 1982). Similarly, the few activities deemed

appropriate for women often carry a derogatory label for male participants. Thus, when choosing an activity, both men and women contend with sex-stereotyped guidelines for behavior.

The differential constraints on sport participation due to sex-role stereotypes and expectations for men and women make sports a viable domain within which to explore individual differences in interest and participation. Differential participation has been viewed by the media as an indication that women are just not interested in sports in general and masculine sports in particular. Similar beliefs are held regarding men's interest and participation in feminine sports. While this view has achieved widespread acceptance there is little empirical data to confirm or disconfirm it. Although some writers have focused on societal and institutional constraints (Dyer, 1982; Gerber, 1974; Harris, 1980) few studies have looked at the individual's self-imposed constraints on sport participation.

The idea of constraints on behavior due to sex role stereotypes and expectations is not new to sex role researchers. Bem (1981; in press) has characterized these constraints as being part of a gender-based, schematic processing of information. Bem's gender schema theory concerns the extent to which an individual processes information on the basis of sex-linked associations and

subsequently makes decisions about the sex-appropriateness of that information. Gender schema theory provides a framework within which gender-based constraints upon sport interest and participation can be addressed.

The research reported below looks at two types of gender-based constraints due to gender-schematic processing in the sport domain. First, it looks at constraints on the individual's experience with and participation in masculine, feminine and neutral sports. Second, it looks at the reasons people give when they reject a sex-inappropriate sport.

Measures

A Sport Participation Questionnaire was developed to assess the two types of gender-based constraints described above. This questionnaire consists of two parts. Gender-based constraints on sport experience and participation were explored in Part I. Part II assessed the degree of gender-based reasoning subjects engaged in to explain their rejection of sex-inappropriate sports.

In Part I, subjects were asked to indicate which of 68 sports they had already participated in. These scores were taken as a measure of subjects' overall experience with sport activities. Subjects also rated how interested they would be in doing the remaining sports they had not tried. Subjects' sport participation was calculated from two questions which appeared on a Background Questionnaire

which they filled out during the same experimental session. These questions asked subjects to list the sports they had played in their free time (or as extra-curricular activities) during high school. Subjects specifically indicated whether the sport was done for physical education classes or for their own purposes. Only those sports subjects reported doing on their own were coded.

The degree to which subjects openly endorse a gender-based dimension to explain their rejection of sex-inappropriate behaviors was explored next. Subjects selected two sports to which they had given a low rating of interest. Subjects then rated how important thirty-four previously determined factors were in their decision to reject participation in that sport. These factors spanned a range of social, athletic and sex role concerns and included such reasons as "too competitive," "not a good workout," "projects a jock image," and "prefer team sports." A three-point scale was used with 1 = not at all important, 2 = moderately important and 3 = extremely important.

Each of the sixty-eight sports used in the Sport Participation Questionnaire had been rated previously by forty male and female undergraduates as to how stereotypically masculine, feminine or neutral they were currently viewed by society. This resulted in thirty

masculine sports, twenty-six neutral sports and twelve feminine sports.

Subjects' responses can either be categorized as responses to masculine, feminine and neutral sports or as responses to sex-appropriate, sex-inappropriate and neutral sports. The questions of interest concern the effect being gender-schematic has on the individual's interest and participation in gender-consistent and gender-inconsistent activities, rather than the effect such processing has on the individual's interest and participation in masculine or feminine sports *per se*. Therefore, it makes more sense, conceptually, to compare males' responses to masculine sports with females' responses to feminine sports (sex-appropriate sports) and to compare males' responses to feminine sports with females' responses to masculine sports (sex-inappropriate sports). In the following analyses, masculine sports were coded sex-appropriate for males and sex-inappropriate for females while feminine sports were coded sex-appropriate for females and sex-inappropriate for males.

The following hypotheses were proposed to assess the effect of gender-schematic processing on sport experience, participation and gender-based reasons for rejecting sex-inappropriate sports:

- 1) Sex-typed subjects were expected to report less overall experience with sex-inappropriate sports than

androgynous and undifferentiated subjects. These groups were not expected to differ from one another in overall experience with neutral or sex-appropriate sports.

- 2) Sex-typed subjects were expected to report lower participation in sex-inappropriate sports than androgynous and undifferentiated subjects, but not differ from these subjects for neutral or sex-appropriate sports.
- 3) Sex-typed subjects were expected to endorse more gender-related reasons when explaining their decisions to reject sex-inappropriate sports than androgynous and undifferentiated subjects.

The data for sport experience and participation were each entered into an overall analysis of variance more fully described later on. The data for endorsement of gender factors when rejecting a sport were first analyzed by means of a factor analysis and then entered into an overall analysis of variance. Subsequent planned comparisons were performed on each data set to evaluate the expected sex-typing differences. The first comparison tested the prediction that sex-typed subjects would report greater experience with, participation and interest in sex-appropriate sports, and lower experience with, participation and interest in sex-inappropriate sports than androgynous and undifferentiated subjects combined.

The second comparison evaluated the prediction that androgynous and undifferentiated subjects would not differ from one another. Post hoc comparisons were performed for cross-sex-typed subjects in each data set. Because previous findings have been mixed as to whether these individuals are or are not gender-schematic, no predictions about this group were made.

It will be noted here that a *priori* planned comparisons are reported in the text as "Planned $t(df)=value, p \text{ value}.$ " Ad hoc comparisons were either performed on cell means and corrected by Dunn's method or were performed on marginal means (Keppel, 1973).

Method

Subjects

Eighty Cornell University students were selected on the basis of their Bem Sex Role Inventory (BSRI) scores to provide equal numbers of male and female sex-typed, cross-sex-typed, androgynous and undifferentiated subjects. Subjects were run in individual experimental sessions by one of three experimenters.

Procedure

Subjects were told that this was a study of people's interest in and experience with various sports and athletic activities offered at Cornell. As each questionnaire had very explicit instructions, subjects were then given the questionnaire packet and asked to

complete the questionnaires in the order given, being careful to read all of the instructions thoroughly. Subjects were encouraged to ask any questions they might have as they progressed through the questionnaires. Each subject worked alone in a sound-proof cubicle. The questionnaires took approximately fifty minutes to complete. Upon completion of the questionnaires, subjects were thoroughly debriefed and thanked for their participation.

Results

Results for Sport Experience

The first page of the Sports Rating Scale was used to obtain an index of subjects' overall sport experience. Subjects were asked to indicate which of 68 sports they had already tried by writing "AP" for "Already Participated" next to the sport. These experience scores reflect the mean percentage of sex-appropriate, sex-inappropriate and neutral sports subjects reported having already tried. For each sport category, the subject's "AP" responses were summed and divided by the number of sports in that category. In this way, subjects' mean percent of experience was calculated for each sport category.

Subjects' scores for overall experience were entered into a two (sex) by four (BSRI) by three (category appropriateness) analysis of variance with repeated

measures on the last factor. There were no sex differences in overall sport participation ($F(1,72)=0.00$, n.s.). as can be seen in the top half of Table 1.

TABLE 1

Mean Percentage of Neutral (N), Sex-Appropriate (SA) and Sex-Inappropriate (SI) Sport Experience Reported by Subjects

	N	SA	SI
Males	.422	.227	.096
Females	.331	.294	.114

Sex-Typed	.329	.204	.076
Cross-Sex-Typed	.394	.268	.119
Androgynous	.438	.320	.143
Undifferentiated	.344	.248	.082

That males and females reported similar levels of sport experience is especially interesting in view of the popular assumption that men participate in more sports than women. For this subject population, women report as much overall experience with sports as men.

The analysis also revealed a significant main effect for sport category, $F(2,144)=69.27$, $p<.0001$. As Table 1 indicates, subjects reported the most experience with neutral sports, followed by sex-appropriate and sex-inappropriate sports. There were no differences among

BSRI groups for overall sport participation ($F(3,72)=1.07$, n.s.).

A significant sex by sport category interaction ($F(2,144)=9.00$, $p<.0002$) indicated that while both sexes do more sex-appropriate than sex-inappropriate sports ($t(7,144)=99.45$, $p<.01$ for males and $t(7,144)=75.05$, $p<.01$ for females.), females participated in significantly more sex-appropriate sports than males ($t(144)=6.41$, $p<.05$). There were no differences between males and females for sex-inappropriate sport participation. It will also be noted that males participated in significantly more neutral sports than females ($t(144)=11.83$, $p<.01$). No other terms in this analysis were significant.

The interaction of interest between sex-type of subject and sex of sport was not significant. However, planned comparisons were carried out to evaluate the hypothesis that sex-typed subjects would have less overall experience with sex-inappropriate sports than androgynous and undifferentiated subjects. Because of the significant sex by sport category interaction, planned comparisons for sex-typing effects were performed for males and females separately. The mean percentages of sports subjects already tried are presented for males and females separately in Table 2.

The above hypothesis was confirmed among the male subjects. Sex-typed males reported significantly lower

experience with sex-inappropriate sports than androgynous and undifferentiated males (Planned $t(144)=1.82$, $p<.05$). Further, sex-typed males did not differ from androgynous and undifferentiated individuals for sex-appropriate sport experience (Planned $t(144)=.042$, n.s.). Androgynous and undifferentiated males did not differ from one another in any of the three categories (Planned $t(144)=.321$ for neutral, $.036$ for sex-appropriate and $.103$ for sex-inappropriate, all n.s.).

Post hoc comparisons revealed that although cross-sex-typed males reported doing more neutral and fewer sex-appropriate sports than the other three groups, the differences were not significant ($t(144)=1.217$, n.s. for neutral; $t(144)=.526$, n.s. for sex-appropriate).

Contrary to expectations among the females, sex-typed women reported significantly lower experience with neutral (Planned $t(144)=5.34$, $p<.01$) and sex-appropriate (Planned $t(144)=17.94$, $p<.01$) sports than androgynous and undifferentiated women combined. There were no differences for sex-inappropriate sports (Planned $t(144)=.394$, n.s.). Post hoc comparisons revealed an unexpected finding that cross-sex-typed and androgynous females reported significantly greater participation in both neutral ($t(144)=30.18$, $p<.01$) and sex-appropriate ($t(144)=15.12$, $p<.01$) sports than sex-typed and undifferentiated females. Although cross-sex-typed and

TABLE 2

Mean Percentage of Overall Experience with Neutral (N), Sex-Appropriate (SA) and Sex-Inappropriate (SI) Sports Reported by Gender-Schematic and Gender-Aschematic Males and Females

MALES	N	SA	SI
Sex-typed	.385	.233	.058
Cross-sex-typed	.458	.203	.108
Androgynous	.408	.240	.117
Undifferentiated	.438	.230	.100
FEMALES			
Sex-typed	.273	.175	.093
Cross-sex-typed	.331	.333	.130
Androgynous	.469	.400	.170
Undifferentiated	.250	.267	.063

androgynous women reported higher participation in sex-inappropriate sports than sex-typed and undifferentiated women, the difference between the groups was not significant ($t(144)=3.70$, n.s.).

One explanation for the findings for females concerns the relationship between masculine trait endorsement and athletic involvement. Colker and Widom (1980) found experienced female athletes rated themselves more masculine than inexperienced athletes. Other researchers (King and Chi, 1979; Clark, 1980) have found greater integration of masculine and feminine traits among

competitive and experienced female athletes than in non-athletes. In the present study, both cross-sex-typed and androgynous women report higher levels of participation in all three sport categories than sex-typed and undifferentiated women ($t(144)=30.18, p<.01$). It is possible that their greater sport experience has led to greater endorsement of those masculine traits which are also good descriptors of the athletic individual.

Results for Sport Participation

As described earlier, subjects' responses from Questions 17 and 18 from the Background Questionnaire were scored for how many neutral, sex-appropriate and sex-inappropriate sports subjects reported. These scores were entered into a two (sex of subject) by three (sport category) by four (BSRI) analysis of variance. The analysis revealed a significant main effect for category appropriateness ($F(2,239)=16.15, p<.0001$), indicating subjects' preferences for neutral over sex-appropriate and sex-appropriate over sex-inappropriate sports. These results parallel those found for overall sport experience.

A main effect for BSRI was due to the low number of extracurricular sport activities reported by undifferentiated subjects. There were no main effects for sex, again indicating that males and females reported similar levels of participation in sports. That no sex differences were found for extracurricular participation

is particularly damaging to the belief that women do fewer sports than men. This measure reflects the individual's choice to do sports in their free time rather than a number of other possible activities. If a sex difference were to emerge, it should emerge here, where there are no confounding factors, such as obligatory physical education classes to obscure the individual's true intent.

There was a significant sex by category appropriateness interaction ($F(2,239)=4.76, p<.01$). Although males and females were similar in the number of neutral sports they reported, males reported doing significantly more sex-appropriate sports than females ($t(239)=19.68, p<.01$) whereas females reported doing significantly more sex-inappropriate sports than males ($t(239)=17.86, p<.01$). These findings are different from those for overall sport experience where males favored neutral sports, females favored sex-appropriate sports, and no differences were found for sex-inappropriate sports.

The interaction of interest to this analysis is the BSRI by category appropriateness interaction. Although it did not reach significance in the analysis ($F(6,239)=1.87, p<.08$) planned comparisons were performed for females and males separately to test the hypotheses involving gender schematicity and sex-inappropriate sport participation.

TABLE 3

Mean Number of Neutral (N), Sex-Appropriate (SA), and Sex-Inappropriate (SI) Extra-Curricular Sports per Person

	N	SA	SI
Males			
Sex-Typed	1.60	1.5	.00
Cross-Sex-Typed	2.10	1.5	.00
Androgynous	1.50	1.2	.60
Undifferentiated	.70	1.2	.30
Females			
Sex-Typed	1.70	1.10	.40
Cross-Sex-Typed	1.50	.70	1.00
Androgynous	1.60	.80	1.10
Undifferentiated	.30	.70	.40

As predicted, sex-typed males did significantly fewer sex-inappropriate sports than androgynous and undifferentiated males ($t(239)=1.80$, $p<.05$). (See Table 3.) In fact, neither sex-typed nor cross-sex-typed males reported doing any sex-inappropriate extra-curricular activities. Sex-typed males did not differ from androgynous and undifferentiated subjects for sex-appropriate sports ($t(239)=.901$, n.s.).

Among the females, the same pattern emerged here as with overall sport experience. Sex-typed women did not do fewer sex-inappropriate sports than androgynous and undifferentiated women combined (Planned $t(239)=.72$,

n.s.). However, androgynous and cross-sex-typed subjects reported significantly greater participation in sex-inappropriate activities than sex-typed and undifferentiated females ($t(239)=2.218$, $p<.025$). There were no differences for sex-appropriate sports ($t(239)=.579$, n.s.).

It appears that for activities subjects choose to do on their own time, sex-typed and cross-sex-typed males are most constrained in their choices away from sex-inappropriate sports. Sex-typed females are similarly constrained when they are compared to androgynous and cross-sex-typed women. None of the groups differed from one another for neutral or sex-appropriate sports.

Results for Endorsement of Gender Reasons for Rejecting a Sex-Inappropriate Sport

These data are comprised of subjects' responses to the last page of the Sports Participation Questionnaire. Subjects rated how important each of thirty-four reasons were for their decision to reject a particular sport. They used a three-point scale with 1 = extremely unimportant, 2 = moderately important and 3 = extremely important. To detect whether subjects responded to gender as a dimension, their responses to the thirty-four reasons were entered into a factor analysis with varimax rotation. Five principal factors were extracted, two of which contained gender-specific reasons and three of which

contained non-gender related reasons. See Table 4 for factors and factor loadings.

TABLE 4

Factors and Factor-loadings Obtained through Principal Components Analysis with Varimax Rotation

Factor 1: Feminine Gender Factor

Female dominated sport	.958
No men participate	.918
No men welcome	.943
Projects "sissy" image	.841
Not competitive	.813
No role model	.778

Factor 2: Masculine Gender Factor

Male dominated sport	.888
No women participate	.860
No women welcome	.886

Factor 3: Effort

Requires too much:	
discipline	.785
commitment	.729
effort	.662

Factor 4: Social

No opportunity to meet	
people	.718
Prefer team sports	.701
Little cooperation	.634
No creativity involved	.613

Factor 5: Physical

Requires too much:	
natural ability	.782
coordination	.693

Factor 1 reflects feminine gender stereotypes whereas Factor 2 reflects masculine stereotypes. Factor 3 appears to be tapping an effort dimension. Factor 4 reflects a concern with the social dimension of sports and Factor 5 reflects the physical dimension.

Mean scores were then calculated for each of the five factors for those subjects who rated a sex-inappropriate sport. The scores for Factors 3, 4 and 5 were entered into a two (sex) by four (BSRI) analysis of variance. As there were no differences among subjects on Factors 4 (Social) and 5 (Physical), they will not be discussed further. A main effect for BSRI was found for Factor 3 (Effort) which reflected cross-sex-typed individual's greater concern with the amount of effort involved than androgynous individuals ($t(58)=3.741, p<.05$).

TABLE 5

Mean Use of Factors 1 and 2 by Subjects Rejecting a Sex-Inappropriate Sport

	Factor 1	Factor 2
	Males	Females
Sex-Typed	2.92	2.00
Cross-Sex-Typed	2.56	1.78
Androgynous	2.17	1.48
Undifferentiated	1.79	1.90

The scores for Factors 1 and 2 were combined into a two (sex) by four (BSRI) by two (sport gender) analysis of variance. A main effect for sport category indicated that the gender factors were used significantly more for sex-inappropriate than for sex-appropriate sports ($F(1,73)=8.55, p<.005$). There was also a sex by sport category interaction, indicating that males used the gender factors more than females in evaluating sex-inappropriate sports ($F(1,73)=16.31, p<.0002$).

The means of interest are those that reflect each BSRI group's use of the appropriate gender factor when rejecting a sex-inappropriate sport. That is, the extent to which sex-typed males used Factor 1 (Too Feminine) when rejecting a feminine sport compared with the extent to which sex-typed females used Factor 2 (Too Masculine) when rejecting a masculine sport was compared with androgynous and undifferentiated males' and females' use of these factors.

As Table 5 shows, sex-typed individuals used the gender factors to a significantly greater extent than androgynous and undifferentiated individuals when evaluating a sex-inappropriate sport (Planned $t(41)=4.13, p<.002$). Further, there were no significant differences between sex-typed and cross-sex-typed individuals ($t(19)=1.49, n.s.$) or between androgynous and undifferentiated individuals ($t(19)=1.02, n.s.$).

Discussion

Overall, sex-typed subjects do appear more constrained in their sport behavior away from sex-inappropriate sports. The hypotheses that sex-typed individuals would be more constrained in their attitudes toward and participation in sex-inappropriate sports received partial support. Among the males, sex-typed subjects reported significantly lower experience with and participation in sex-inappropriate sports than androgynous and undifferentiated subjects. As predicted, there were no differences among the males for sex-appropriate experience and sport participation. However, sex-typed males did express greater interest in trying new sex-appropriate sports than the other two groups.

Although sex-typed females report lower overall experience and participation in all three sport categories compared to androgynous and undifferentiated women, the difference for sex-inappropriate sports was not significant. However, there was an interesting and unexpected finding that androgynous and cross-sex-typed females looked quite similar in their overall experience and participation. When sex-typed women were compared with these two groups, significant differences did emerge for sport participation in the expected direction.

The hypothesis that sex-typed individuals would endorse more gender-based reasons for rejecting a sex-

inappropriate sport was confirmed. Sex-typed subjects paid significantly more attention to the gender of the sport when declining to participate than did androgynous and undifferentiated subjects. Other research has shown that sex-typed individuals also spontaneously cite the gender connotation of the sport (when it is a sex-inappropriate sport) as a reason for rejecting participation (Matteo, 1984).

Although no sex differences for overall sport experience and participation were predicted, the fact that none emerged is noteworthy. That males and females reported equal levels of experience and participation in sport is particularly damaging to our society's popular belief that women are not as interested in sports as men. Despite the fact that female athletes are all but invisible in the sports pages, women are participating in sports to as great an extent as men are.

There are at least three directions future research could take in these areas. The first concerns the extent to which gender-based constraints influence the individual's perceptions of others' sport behaviors. There is some evidence that sex-typed people form impressions of other sport participants on the basis of a match between the other's sex and the sex of the sport being played. For example, when told only that a person enjoys doing either a masculine or feminine sport, the

sex-typed individual is more likely than the androgynous and undifferentiated individual to form a masculine or feminine impression of that person, consistent with the gender stereotype of the sport (Matteo, 1984).

Similarly, the extent to which gender is relevant to those around the developing individual might shed light on the relationship between behavior, role models, self-relevant information and one's own experience. For example, the effect of gender-schematic processing on the attitudes and behaviors of those who work with children in a sport context might be considered. To what extent does being gender-schematic constrain the expectations and perceptions of teachers and coaches for their young charges? How do these constraints, if they exist, affect the child's perception of herself or himself, as a sport participant? Though the child may not demonstrate gender schematicity until later in development, the expectations of others may begin to set a pattern for the child's expectations of him- or herself.

Finally, the extent to which gender-schematicity perpetuates the invisibility of appropriate role models for both men and women who wish to participate in sex-incongruent sports should be explored. Until gender-based stereotypes about men and women are eliminated and we find ourselves in the gender-aschematic society Bem (in press) prescribes, attitudes and behaviors will continue to be constrained in the manner suggested in this thesis.

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